

Claims

We claim:

1. A composition comprising a tissue glue and, retained in the glue, in particulate form, a radiotherapeutic agent or agent convertible to a radiotherapeutic, whose therapeutic effect is mediated locally, on degradation of the glue.

2. The composition according to claim 1, which additionally comprises a material that accelerates degradation of the glue.

3. The composition according to claim 2, wherein the glue is proteinaceous and said material is proteolytic.

4. The composition according to claim 1, which additionally comprises a material that inhibits degradation of the glue.

5. The composition according to claim 1, wherein the agent is in the form of a chelate holding a radioactive atom.

6. The composition according to claim 1, wherein the agent is a ferrite.

7. The composition according to claim 1, which additionally comprises a radiation sensitizer capable of leaching out and augmenting the local radiotherapeutic effect.

8. The composition according to claim 1, which additionally comprises a growth factor or other substance that mitigates the anti-wound-healing effect of radiation.

9. The composition according to claim 1, wherein the agent comprises a zinc-substituted yttrium ferrite, or a  $^{56}\text{Fe}$ -enriched ferrite.

10. The composition according to claim 1, wherein the agent comprises  $^{103}\text{Pd}$  or  $^{90}\text{Y}$ .

1 11. A method for the radiotherapy of a tumor, which comprises applying to the  
2 tumor an effective amount of a composition as defined in claim 1.

1 12. The method of claim 11, wherein the radiotherapy of a tumor comprises  
2 brachytherapy.

1 13. A composition comprising an antibody, a particulate radionuclide and a  
2 fibrinogen tissue glue.

1 14. The composition according to claim 13, wherein the particulate radionuclide  
2 is a  $\beta$ -emitting ferrite.

1 15. The composition according to claim 13, wherein the particulate radionuclide  
2 is coupled to the antibody.

1 16. The composition according to claim 15, wherein the antibody is a nerve  
2 adhesion molecule.

1 17. A method for making a radiotherapeutic composition comprising an antibody,  
2 a particulate radionuclide and a fibrinogen tissue glue which comprises:

- 3 (a) preparing a particulate radionuclide; and  
4 (b) mixing the particulate radionuclide with the fibrinogen tissue glue and the  
antibody.

1 18. A method of using a radiotherapeutic composition comprising an antibody, a  
2 particulate radionuclide and a fibrinogen tissue glue which comprises applying the  
3 composition directly to tumor tissue.

1 19. A method of radiation synovectomy which comprises administering an  
2 effective amount of a composition of claim 1 to a patient to be treated.

1 20. A method of radiotherapy in the treatment of arterio-venous malformations in  
2 a blood vessel which comprises applying to the blood vessel a composition as defined in  
3 claim 1.